**isomer shift**

*in Mössbauer spectroscopy*

Measure of the energy difference between the source ($E_s$) and the absorber ($E_a$) transition. The measured Doppler velocity shift, $\delta$, is related to the energy difference by

$$E_a - E_s = \frac{\delta E_\gamma}{c}$$

where $E_\gamma$ is the Mössbauer gamma energy and $c$ is the speed of light in vacuum.

**Source:**
PAC, 1976, 45, 211 (*Nomenclature and Conventions for Reporting Mossbauer Spectroscopic Data*) on page 214